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(71) Applicant:
General Instrument Corporation
Horsham, Pennsylvania 19044 (US)

(72) Inventors:
• Chen, Xuemin
San Diego, California 92129 (US)
• Liu, Vincent
San Diego, California 92129 (US)

(74) Representative:
Hoeger, Stellrecht & Partner
Uhlandstrasse 14 c
70182 Stuttgart (DE)

(54) Scene change detector for digital video

(57) In a method for detecting a scene change between a prior video picture and a current video picture of a sequence of pictures, an average luminance value is determined for a block pair of the prior and current video pictures. Preferably, the blocks of the block pair are located, respectively, in the same relative position in the prior and current pictures. An incremental visual sensation value is determined using a difference between the average luminance values. If the incremental visual sensation value exceeds a block contrast threshold level, a scene change is indicated. In particular, if the minimum of the average luminance values of

the current and prior picture blocks exceeds a dark scene threshold, the incremental visual sensation value is determined using the ratio of (a) the absolute value of the difference between the average luminance values, and (b) the minimum of the average luminance values of the current and prior picture blocks. Otherwise, the incremental visual sensation value is determined using the ratio of (a) the absolute value of the difference, and (b) the dark scene threshold. The method may be optimized by adjusting the block size based on the relative amount of motion and the current picture type.

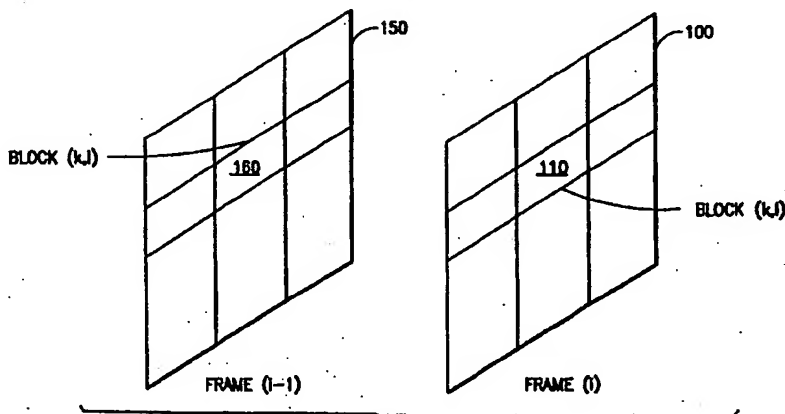


FIG.1

EP 0 833 503 A3



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EUROPEAN SEARCH REPORT

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EP 97 11 6200

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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Place of search THE HAGUE		Date of completion of the search 21 May 1999	Examiner Fuchs, P
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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